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## The GLO website and You

BY JEFF METIUS

The General Land Office (GLO) was originally created in 1820 to manage all actions related to public lands. This included surveys, sales, and patents. It operated as a solo government entity until 1946 when the GLO was consolidated with the U.S. Grazing Service to become the Bureau of Land Management (BLM). But the GLO still exists within the BLM, providing live access to federal land conveyance records for the

Public Land States, including image access to more than five million federal land title records issued between 1820 and the present. From the current GLO website, <http://www.glorerecords.blm.gov/default.aspx>, you can find easily access to land patents, survey plats, field notes, Land Status Records, and control document index records. *(Continued on page 2.)*

## Land Buy-Back Program

Boozhoo (Hello)!

BOGS is excited to be supporting the Land Buy-Back Program by acting as a coordinator for mapping data and scheduling. According to the Department of the Interior's Land Buy-Back website (<https://www.doi.gov/buybackprogram>), "The Land Buy-Back Program for Tribal Nations implements the land consolidation component of the Cobell Settlement, which provided \$1.9 billion to purchase fractional interests in trust or restricted land from willing sellers at fair market value. Consolidated interests are immediately restored to tribal trust ownership for uses benefiting the reservation community and tribal members." The mapping process of the Land Buy-Back Program involves first coordinating with the National Land Buy-Back team to develop a schedule for reservations involved in Land Buy-Back for the upcoming fiscal year (this is determined by the Buy-Back Program, Department of Minerals and Energy and Office of Appraisal Services/Office of Special Trustee for

BY TRAVIS BLACKETTER

American Indians). Once the schedule is developed, BOGS sets dates for requesting Trust Asset and Accounting

Management System (TAAMS) data from a contract company. When the data is delivered, we perform an internal quality control check on the data, and then we send the data to our parcel mapping contractor, which begins the complicated process of mapping the parcels of land. The final parcel mapping data is then delivered to BOGS, and it undergoes another quality control procedure before being posted to our data repository. To date, after assuming responsibility of mapping data and scheduling from the BLM, BOGS has processed and coordinated the mapping of numerous reservations for Land Buy-Back including a special request from the Solicitor's office. *(Continued on page 2.)*



Image: Flathead Reservation.  
Source: Department of the Interior.

# New Staff Member: Brian

BY BRIAN CONNOLLY



Brian Connolly recently joined the BOGS team as a Geographic Information Systems (GIS) and Remote Sensing Analyst for the BIA National Interagency Fire Center. Brian received a B.S. in Geology from the University of Maryland, specializing in geochemistry and remote sensing applications. He previously worked for a private company that uses Light Detection and Ranging (LIDAR) to map the bathymetry of coastal areas. After spending the past four years in San Diego, Brian and his wife recently relocated to Colorado. In his free time, Brian enjoys photography, hiking, camping, and spending time with his two dogs. Brian survived his first Colorado winter and is looking forward to hiking some fourteens (mountains over 14,000 feet)!

# New Staff Member: Phillip

BY PHILLIP JULIAN

Originally hired to work with the BIA Division of Land Titles and Records, primarily with the Land Buy-Back program, Phillip was moved to the BOGS group in April 2016. He is genuinely passionate about GIS and enjoys sharing this passion with others. Phillip started working with flood maps and GIS software at a private company before he earned a B.S. in GIS with a minor in Geology from Texas State University in 2012. Phillip, a native of Texas, met his wife, Gina, in Houston where they enjoyed Astros ballgames and crawfish boils. They moved to Denver in early 2014 and now spend the weekends driving down backroads and scenic byways, always on the lookout for new places to camp, hike, fish, and explore.



## Land Buy-Back Program (continued)

The Department of the Interior states, "There are approximately 245,000 owners of nearly three million fractional interests across Indian Country who are eligible to participate in the Buy-Back Program. Landowners can contact the Trust Beneficiary Call Center at 888-678-6836 or visit their local Office of the Special Trustee for American Indians to update their contact information, ask questions about their land or purchase offers, and learn about financial planning resources." Visit the Land Buy-Back webpage for more information: <https://www.doi.gov/buybackprogram>.

## The GLO website and You (continued)

The GLO website is an invaluable tool for comparing TAAMS records to historical survey plats. Consider taking some time to check the website out and explore the original plats for your location.

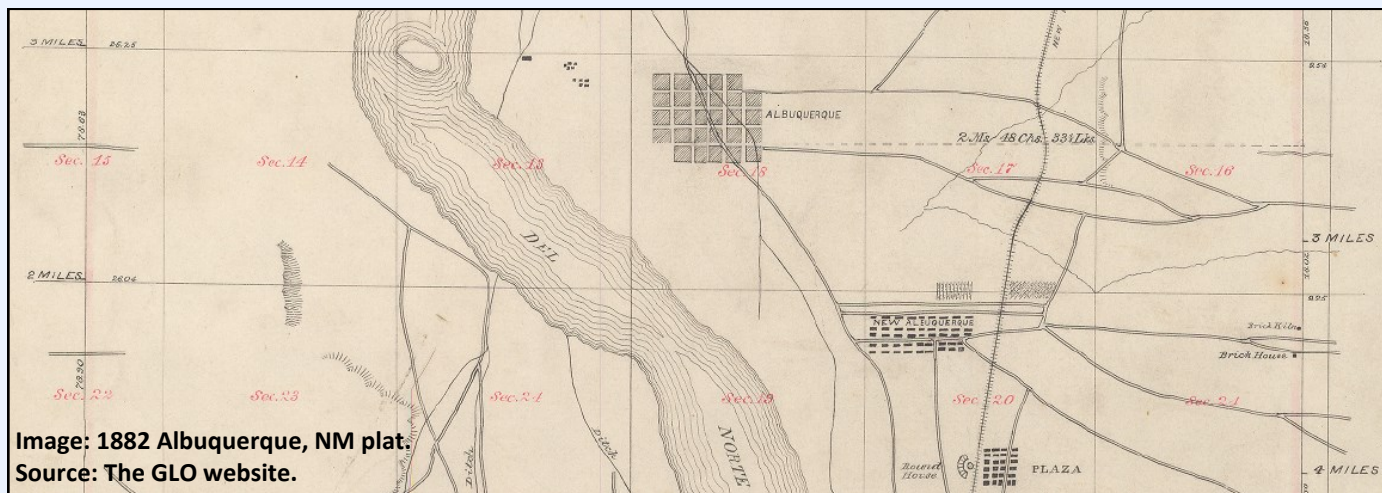


Image: 1882 Albuquerque, NM plat.  
Source: The GLO website.

## CURRENT STAFF

**Chad Wallace**

BOGS Branch Chief

**Shane Willard, GISP**

Geospatial Program  
Manager/Contract Lead

**Donna Offerson**

ELA Coordinator/  
Technical Support  
Administrator

**Lindsay Eaves**

Geospatial Support  
Coordinator

**Rod Kuhns**

GIS Applications  
Architect

**David O'Donnell**

GIS Analyst

**Devin Johnson**

GIS Analyst

**Brian Connolly**

GIS Analyst

**Phillip Julian**

GIS Analyst

**Travis Blacketter**

Cartographer

**Brad Tatham, GISP**

Senior Geospatial  
Trainer

**Katie Lewers**

Geospatial Trainer

**Jeff Fennell, GISP**

Geospatial Trainer

**Jeff Metius**

DTLR Trainer



# Data Depot: Using Online Map Content in ArcGIS Desktop

BY ROD KUHN

ArcGIS Map Documents (.mxd files) are geospatial files that contain data layers used to create maps. Although it is common for ArcMap users to add layers to their maps from data stored on their desktops, data for layers can also come from sources on the Internet in the form of ArcGIS Server Map Services. These services can provide data layers such as elevation layers, feature layers, map image layers, imagery layers, and tile layers from Map Services. All Map Services layers have a URL associated with them. The process to add a layer from a map service includes creating a connection and then adding the layers.

## Example: Add online USGS topography to your map.

1. Add a Connection to the GIS Server: In ArcCatalog, expand the GIS Servers portion of the catalog tree and double click **Add ArcGIS Server**. Select **Use GIS services**, and click **Next**. Enter the Representational State Transfer (REST) Services URL (<http://basemap.nationalmap.gov/arcgis/rest/services/USGSTopo/MapServer>), and click the **Finish** button. A node will appear under the GIS Servers listing all data layers available from the web-based source.
2. Add the data to your ArcGIS map: In ArcMap, click the **Add Data** button, navigate to the GIS Servers folder in the Catalog Tree, and select the layer to add to your map. After you click the **Add** button, the web-based data you selected will be displayed on your map.

## Sources for data from Map Services include:

USGS Imagery - <http://basemap.nationalmap.gov/arcgis/rest/services/USGSImageryOnly/MapServer>

ArcGIS Online - <http://server.arcgisonline.com/ArcGIS/rest/services>

Online Tutorial: <http://www.pasda.psu.edu/tutorials/howtoconnectmapservicearcserver.asp>

Of course, don't forget to give credit where credit is due. Cite your data sources on your map, and read the use limitations to make sure you are operating within the intended use of the data.

Background image source: USGS Imagery.

## Tips & Tricks

### ArcPad: Copy & Paste

BY BRAD TATHAM

If you are using shapefiles to capture GPS in ArcPad, you can simply copy and paste the data between the computer and the ArcPad unit, instead of using the ArcPad Data Manager toolbar in ArcMap. If you need the symbology transferred to ArcPad, then do it separately with the ArcPad Data Manager toolbar.



### ArcMap: Reduce Clutter

BY JEFF FENNELL

In most, cases you use a few tools from a variety of toolbars, but never touch the others. You can create a custom toolbar and add only the tools you commonly use.

To create a new toolbar in ArcMap, navigate to Customize > Customize Mode. On the Toolbars tab, click New.

With your new toolbar created, you can add tools into it from the Commands tab in Customize Mode. Below is a custom toolbar made using this method.

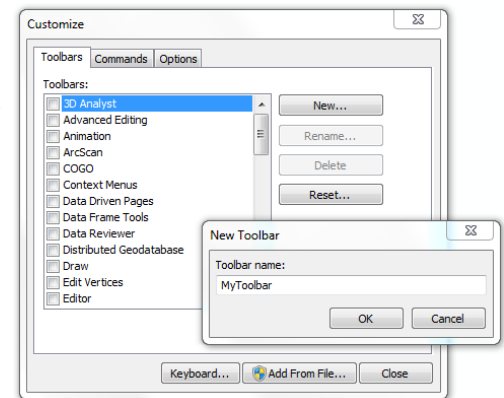


Image: The May 2016 *Principles of GIS* Training Class at the BOGS Training Facility in Lakewood, CO. All students meeting the BOGS training requirements receive a BOGS Certificate of Completion at the end of each course.

# JUNE - SEPTEMBER 2016

## GEOSPATIAL TRAINING SCHEDULE

BOGS provides geospatial training for employees of federally recognized tribes and to Office of Trust Services (OTS) supported functions within the BIA. OTS supported functions includes GIS related activities under the Divisions of Real Estate Services, Land Titles and Records, Probate, Natural Resources, Forestry and Wildland Fire Management, and Water and Power. All slots not filled one month before the beginning of the course will then be open to and filled on a first come, first served basis by employees of federally recognized tribes and with employees of the BIA from any office.

There is no tuition cost for this training. Training equipment and training materials are provided by BOGS. Expenses for transportation, hotel accommodations, and meals are the responsibility of the participant's organization. Training courses are available at the BOGS Lakewood Training Facility in Lakewood, Colorado and at various field locations per request and availability.

Level	Course Location	Course	Date
Beginner	Lakewood Training Facility BIA Central Office Lakewood, CO	<i>Principles of GIS</i>	Jun 6–9, 2016
Beginner	Oglala Sioux Tribe Great Plains Region Pine Ridge, SD	<i>Principles of GIS</i>	Jun 20–23, 2016
Intermediate	Lakewood Training Facility BIA Central Office Lakewood, CO	<i>Introduction to Cartography*</i>	Jul 25–28, 2016
Intermediate	Cheyenne and Arapaho Tribes Southern Plains Concho, OK	<i>Introduction to Cartography*</i>	Aug 8–11, 2016
Intermediate	Lakewood Training Facility BIA Central Office Lakewood, CO	<i>Introduction to Cartography*</i>	Sep 12–15, 2016
Beginner	BIA Pacific Regional Office Sacramento, CA	<i>Principles of GIS</i>	Sep 26–29, 2016

All courses are taught in ArcGIS version 10.2.2 and ArcPad 10.2 unless otherwise indicated.

\* Indicates this course has a prerequisite.

**Due to the high demand for training, please register early to help ensure placement in the requested course.**

**To register for a course, email or fax a completed and signed registration form to [geospatial@bia.gov](mailto:geospatial@bia.gov).**

Visit the Geospatial Support website at <http://bia.gov/> and select **Geospatial** from the dropdown, call the Geospatial Support Help Desk at 877.293.9494, or email [geospatial@bia.gov](mailto:geospatial@bia.gov) for a copy of the latest training brochure, which includes a registration form, course descriptions, cancellation and absence policies, priority information, and other training policies.

**BUREAU OF INDIAN AFFAIRS**  
**OFFICE OF TRUST SERVICES, DIVISION OF LAND TITLES AND RECORDS**  
**BRANCH OF GEOSPATIAL SUPPORT**  
**13922 Denver West Parkway, Building 54, Suite 300, Lakewood, CO 80401**  
**Phone: 877.293.9494 (toll-free) Fax: 303.231.5229 Email: [geospatial@bia.gov](mailto:geospatial@bia.gov)**  
**<http://bia.gov>**  
 (select **Geospatial** from the Categories dropdown)

**BOGS Training Facility**  
**Lakewood, CO**

Background image  
source: USGS Topo.

**Branch of Geospatial Support**  
**39.744957, -105.154573**